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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/043,539

DATE: 09/05/2002  
TIME: 09:25:01

Input Set : A:\DC-0199SEQ.txt  
Output Set: N:\CRF3\09052002\J043539.raw

3 <110> APPLICANT: Cheung, Ambrose  
 4 Manna, Adar  
 5 Zhang, Gongyi  
 7 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR AFFECTING VIRULENCE  
 DETERMINANTS IN  
 8 BACTERIA  
 10 <130> FILE REFERENCE: DC-0199  
 12 <140> CURRENT APPLICATION NUMBER: US 10/043,539  
 13 <141> CURRENT FILING DATE: 2002-01-11  
 15 <150> PRIOR APPLICATION NUMBER: US 60/261,233  
 16 <151> PRIOR FILING DATE: 2001-01-12  
 18 <150> PRIOR APPLICATION NUMBER: US 60/261,607  
 19 <151> PRIOR FILING DATE: 2001-01-12  
 21 <150> PRIOR APPLICATION NUMBER: US 60/289,601  
 22 <151> PRIOR FILING DATE: 2001-05-08  
 24 <160> NUMBER OF SEQ ID NOS: 34  
 26 <170> SOFTWARE: PatentIn version 3.1  
 28 <210> SEQ ID NO: 1  
 29 <211> LENGTH: 947  
 30 <212> TYPE: DNA  
 31 <213> ORGANISM: Staphylococcus aureus  
 33 <220> FEATURE:  
 34 <221> NAME/KEY: CDS  
 35 <222> LOCATION: (208)..(552)  
 36 <223> OTHER INFORMATION:  
 38 <400> SEQUENCE: 1  
 39 gttttcaaaa tcgggtggagg tgcattaaaa agttattggg catttttga aaataaaaaaa 60  
 41 atatcaataa gttggagtca ttaccgaatt tttatactta tttgtttaga atgaacttta 120  
 43 taacatagtt ggatagagtt ttcgattta tacattaaat gtgaaccttg ctacaacaag 180  
 45 atgtgcataa gaaggagttt ttaata atg agt aaa att aat gat att aat gat 234  
 46 Met Ser Lys Ile Asn Asp Ile Asn Asp  
 47 1 5  
 49 tta gtc aac gca aca ttt caa gtt aag aag ttt ttc aga gat aca aaa 282  
 50 Leu Val Asn Ala Thr Phe Gln Val Lys Lys Phe Phe Arg Asp Thr Lys  
 51 10 15 20 25  
 53 aag aag ttc aat ttg aac tat gaa gaa att tat att tta aat cat att 330  
 54 Lys Lys Phe Asn Leu Asn Tyr Glu Ile Tyr Ile Leu Asn His Ile  
 55 30 35 40  
 57 tta aga agt gag tct aac gaa atc tca tct aaa gag att gct aag tgc 378  
 58 Leu Arg Ser Glu Ser Asn Glu Ile Ser Ser Lys Glu Ile Ala Lys Cys  
 59 45 50 55  
 61 tca gag ttc aaa cct tac tat tta act aaa gct tta caa aag cta aaa 426  
 62 Ser Glu Phe Lys Pro Tyr Tyr Leu Thr Lys Ala Leu Gln Lys Leu Lys  
 63 60 65 70

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65 gat tta aaa ttg tta tca aag aaa aga agt tta caa gac gaa aga aca	474
66 Asp Leu Lys Leu Leu Ser Lys Lys Arg Ser Leu Gln Asp Glu Arg Thr	
67 75 80 85	
69 gtt att gtt tat gtt aca gat aca caa aaa gca aat att caa aaa ctg	522
70 Val Ile Val Tyr Val Thr Asp Thr Gln Lys Ala Asn Ile Gln Lys Leu	
71 90 95 100 105	
73 att tca gaa tta gaa gaa tac att aaa aat taaatcaagg ttaattgcgt	572
74 Ile Ser Glu Leu Glu Glu Tyr Ile Lys Asn	
75 110 115	
77 ttaataacat tgaacgataa caatttatta atacgaagtt atttattcag cattggaca	632
79 taaaattaac taaaattta aatattgaag atgcttaat taaaagttaaa gaccagccat	692
81 accttatttc agcttattaa gcttgacaca aggtacacta gtcttttat tttaatattt	752
83 tcttagaaaa tcaagttac gatcataaat atttctgcg atatagctt ggatggttcc	812
85 aagtattttc tctataattt gtgtgcgata agcaaaaatt ctaactgcaa aaccatgtgt	872
87 aggcaattga gaaatagcaa cacgacaatc ggatgtattt ctataagaac taatggtttc	932
89 ataaaactgaa tcgat	947
92 <210> SEQ ID NO: 2	
93 <211> LENGTH: 115	
94 <212> TYPE: PRT	
95 <213> ORGANISM: Staphylococcus aureus	
97 <400> SEQUENCE: 2	
99 Met Ser Lys Ile Asn Asp Ile Asn Asp Leu Val Asn Ala Thr Phe Gln	
100 1 5 10 15	
103 Val Lys Lys Phe Phe Arg Asp Thr Lys Lys Lys Phe Asn Leu Asn Tyr	
104 20 25 30	
107 Glu Glu Ile Tyr Ile Leu Asn His Ile Leu Arg Ser Glu Ser Asn Glu	
108 35 40 45	
111 Ile Ser Ser Lys Glu Ile Ala Lys Cys Ser Glu Phe Lys Pro Tyr Tyr	
112 50 55 60	
115 Leu Thr Lys Ala Leu Gln Lys Leu Lys Asp Leu Lys Leu Leu Ser Lys	
116 65 70 75 80	
119 Lys Arg Ser Leu Gln Asp Glu Arg Thr Val Ile Val Tyr Val Thr Asp	
120 85 90 95	
123 Thr Gln Lys Ala Asn Ile Gln Lys Leu Ile Ser Glu Leu Glu Glu Tyr	
124 100 105 110	
127 Ile Lys Asn	
128 115	
131 <210> SEQ ID NO: 3	
132 <211> LENGTH: 124	
133 <212> TYPE: PRT	
134 <213> ORGANISM: Staphylococcus aureus	
136 <400> SEQUENCE: 3	
138 Met Ala Ile Thr Lys Ile Asn Asp Cys Phe Glu Leu Leu Ser Met Val	
139 1 5 10 15	
142 Thr Tyr Ala Asp Lys Leu Lys Ser Leu Ile Lys Lys Glu Phe Ser Ile	
143 20 25 30	
146 Ser Phe Glu Glu Phe Ala Val Leu Thr Tyr Ile Ser Glu Asn Lys Glu	
147 35 40 45	
150 Lys Glu Tyr Tyr Leu Lys Asp Ile Ile Asn His Leu Asn Tyr Lys Gln	

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```

151      50          55          60
154 Pro Gln Val Val Lys Ala Val Lys Ile Leu Ser Gln Glu Asp Tyr Phe
155      65          70          75          80
158 Asp Lys Lys Arg Asn Glu His Asp Glu Arg Thr Val Leu Ile Leu Val
159          85          90          95
162 Asn Ala Gln Gln Arg Lys Lys Ile Glu Ser Leu Leu Ser Arg Val Asn
163          100         105          110
166 Lys Arg Ile Thr Glu Ala Asn Asn Glu Ile Glu Leu
167          115         120
170 <210> SEQ ID NO: 4
171 <211> LENGTH: 30
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial Sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: Degenerate oligonucleotide.
178 <400> SEQUENCE: 4
179 atgwswaaaa tyaaygatata yaaygatttt                                30
182 <210> SEQ ID NO: 5
183 <211> LENGTH: 30
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Degenerate oligonucleotide.
190 <400> SEQUENCE: 5
191 attwswytcw swwckyaara trtgrttyaa                                30
194 <210> SEQ ID NO: 6
195 <211> LENGTH: 24
196 <212> TYPE: DNA
197 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Synthetic oligonucleotide.
202 <400> SEQUENCE: 6
203 gcatgaaaaa gatatcgggc attt                                24
206 <210> SEQ ID NO: 7
207 <211> LENGTH: 26
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Synthetic oligonucleotide.
214 <400> SEQUENCE: 7
215 gtgagtctaa cgatatctca tctaaa                                26
218 <210> SEQ ID NO: 8
219 <211> LENGTH: 14
220 <212> TYPE: PRT
221 <213> ORGANISM: Staphylococcus aureus
223 <220> FEATURE:
224 <221> NAME/KEY: MISC_FEATURE
225 <222> LOCATION: (1)..(1)
226 <223> OTHER INFORMATION: "X" is defined as any amino acid residue.

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RAW SEQUENCE LISTING  
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228 <220> FEATURE:
229 <221> NAME/KEY: MISC_FEATURE
230 <222> LOCATION: (13)..(13)
231 <223> OTHER INFORMATION: "X" is defined as being either S or T.
233 <400> SEQUENCE: 8
W--> 235 Xaa Lys Ile Asn Asp Ile Asn Asp Leu Val Asn Ala Xaa Phe
236 1 5 10
239 <210> SEQ ID NO: 9
240 <211> LENGTH: 8
241 <212> TYPE: DNA
242 <213> ORGANISM: Staphylococcus aureus
244 <400> SEQUENCE: 9
245 aggagtgg 8
248 <210> SEQ ID NO: 10
249 <211> LENGTH: 6
250 <212> TYPE: DNA
251 <213> ORGANISM: Staphylococcus aureus
253 <400> SEQUENCE: 10
254 tagaat 6
257 <210> SEQ ID NO: 11
258 <211> LENGTH: 6
259 <212> TYPE: DNA
260 <213> ORGANISM: Staphylococcus aureus
262 <400> SEQUENCE: 11
263 ttacccg 6
266 <210> SEQ ID NO: 12
267 <211> LENGTH: 20
268 <212> TYPE: DNA
269 <213> ORGANISM: Staphylococcus aureus
271 <400> SEQUENCE: 12
272 ttactaaatt aaaaaaaatta 20
275 <210> SEQ ID NO: 13
276 <211> LENGTH: 28
277 <212> TYPE: DNA
278 <213> ORGANISM: Staphylococcus aureus
280 <400> SEQUENCE: 13
281 taaaattatg ttattttta ataattta 28
284 <210> SEQ ID NO: 14
285 <211> LENGTH: 8
286 <212> TYPE: DNA
287 <213> ORGANISM: Staphylococcus aureus
289 <400> SEQUENCE: 14
290 taaaattaa 8
293 <210> SEQ ID NO: 15
294 <211> LENGTH: 8
295 <212> TYPE: DNA
296 <213> ORGANISM: Staphylococcus aureus
298 <400> SEQUENCE: 15
299 ataattta 8

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RAW SEQUENCE LISTING  
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Input Set : A:\DC-0199SEQ.txt  
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302 <210> SEQ ID NO: 16	
303 <211> LENGTH: 8	
304 <212> TYPE: DNA	
305 <213> ORGANISM: Staphylococcus aureus	
307 <400> SEQUENCE: 16	
308 taaaattat	8
311 <210> SEQ ID NO: 17	
312 <211> LENGTH: 20	
313 <212> TYPE: DNA	
314 <213> ORGANISM: Staphylococcus aureus	
316 <400> SEQUENCE: 17	
317 ttactaaatt aaaaaaatta	20
320 <210> SEQ ID NO: 18	
321 <211> LENGTH: 49	
322 <212> TYPE: DNA	
323 <213> ORGANISM: Staphylococcus aureus	
325 <400> SEQUENCE: 18	
326 tcttaagacc taaaattaatg ttatTTTTataatTTaca ccaaattaa	49
329 <210> SEQ ID NO: 19	
330 <211> LENGTH: 210	
331 <212> TYPE: DNA	
332 <213> ORGANISM: Staphylococcus aureus	
334 <400> SEQUENCE: 19	
335 gttttcaaaa tcgggtggagg tgcatgaaaa agttattggg catttttga aaataaaaaa	60
337 atatcaataa gttggagtca ttaccgaatt ttataactta tttgttttaga atgaacttta	120
339 taacatagtt ggatagagtt ttcgatTTaa tacattaaat gtgaaccttg ctacaacaag	180
341 atgtgcatac gaaggaggatgg ttaataatg	210
344 <210> SEQ ID NO: 20	
345 <211> LENGTH: 29	
346 <212> TYPE: DNA	
347 <213> ORGANISM: Staphylococcus aureus	
349 <400> SEQUENCE: 20	
350 ctaaattaat gttatTTTTT aataattta	29
353 <210> SEQ ID NO: 21	
354 <211> LENGTH: 3	
355 <212> TYPE: DNA	
356 <213> ORGANISM: Staphylococcus aureus	
358 <400> SEQUENCE: 21	
359 aaa	3
362 <210> SEQ ID NO: 22	
363 <211> LENGTH: 20	
364 <212> TYPE: DNA	
365 <213> ORGANISM: Staphylococcus aureus	
367 <400> SEQUENCE: 22	
368 aattaccttg tattgtcgat	20
371 <210> SEQ ID NO: 23	
372 <211> LENGTH: 22	
373 <212> TYPE: DNA	
374 <213> ORGANISM: Staphylococcus aureus	

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/043,539

DATE: 09/05/2002  
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Input Set : A:\DC-0199SEQ.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; Xaa Pos. 1,13  
Seq#:26; Xaa Pos. 2,4,10,15,16,17,19,20,24,25,31,38,44,45,47,51,52,58,59,61  
Seq#:26; Xaa Pos. 73,77,78,86,87,95,97,99,102,106,110,114,117,118,120

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/043,539

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Input Set : A:\DC-0199SEQ.txt  
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L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:533 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
L:537 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:16  
L:541 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:32  
L:545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:48  
L:549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:64  
L:553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:80  
L:557 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:96  
L:561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:112